

AN ADDITIONAL SPECIES OF THE GENUS *AGLAOSTIGMA* KIRBY  
(HYMENOPTERA: TENTHREDINIDAE) FROM JAPAN

ICHIJI TOGASHI

1-chome, Tsurugihonmachi, Hakusan-shi, Ishikawa Prefecture 920-2121, Japan

*Abstract.*—*Aglaostigma kawazoei*, n. sp., from Japan is described and illustrated. A key is provided for the nine Japanese species of *Aglaostigma*.

*Key Words:* Symphyta, Tenthredinidae, *Aglaostigma*, new species, Japan

*Aglaostigma* Kirby is a Holarctic and Oriental genus containing about 52 species (Taeger and Blank 2005). In Japan, *A. albicinctum* (Takeuchi 1953), *A. amoorensis* (Cameron 1876), *A. helvicinctum* Togashi 1970, *A. naitoi* Togashi 1972, *A. nebulosum* (André 1881), *A. occipitosum* (Malaise 1931), *A. sapporonis* (Matsumura 1912), and *A. yasumatsui* Togashi 1970, are known. The Japanese species were first revised by Togashi (1970), with a subsequent species added by Togashi (1972). Recently, I obtained four specimens (two females and two males) of this genus collected by A. Kawazoe and M. Inagaki in Mie Prefecture. These specimens are very close to *A. amoorensis* in body color, but they can be separated from the latter by the two middle cells in the hindwing (Figs. 4, 5, 7), the straight radial crossvein (2r) of the forewing (Figs. 3, 6), the shape of the tarsal claws (Figs. 10, 17), the shape of the inner tibial spur (Figs. 9, 16), and the color of the mesopleura. I concluded that these specimens represent a new species, and I describe and illustrate them and give a key to the Japanese species of *Aglaostigma*.

KEY TO JAPANESE SPECIES OF  
*AGLAOSTIGMA* (FEMALES)

1. Hindwing without middle cell; postocellar furrow indistinct; hind tibia and tarsus black of blackish . . . . . *yasumatsui* Togashi
- Hindwing with one or two middle cells; postocellar furrow distinct; hind tibia and tarsus reddish yellow or black . . . . . 2
2. First abdominal tergite black or blackish . . . . . 3
- First abdominal tergite yellow or reddish yellow . . . . . 7
3. Abdomen black or black with a white band on 4th segment . . . . . 4
- Abdomen yellow or reddish yellow . . . . . 5
4. Fourth abdominal segment with a white band; radial crossvein (2r) of forewing slightly curved . . . . . *albicinctum* (Takeuchi)
- Abdomen entirely black; radial crossvein (2r) of forewing nearly straight . . . . . *naitoi* Togashi
5. Supra-antennal tubercles distinctly elevated, free standing and abruptly cut off from frontal ridges; postocellar area nearly quadrate; 2nd to 6th abdominal segments reddish yellow . . . . . *nebulosum* (André)
- Supra-antennal tubercles and frontal ridges confluent; postocellar area nearly transverse; narrow band on anterior margin of 2nd to 6th abdominal segments black . . . . . 6
6. Mesopleuron with yellowish-white macula; hind wing with one middle cell (Fig. 7); anal cell of hind wing with a petiole (Fig. 7); tarsal claw as in Fig. 17 . . . . . *amoorensis* (Cameron)
- Mesopleuron entirely black; hind wing with two middle cells (Fig. 4); anal cell of hind wing sessile (Fig. 4); tarsal claw as in Fig. 10 . . . . . *kawazoei*, n. sp.
7. OOL = 3POL; OCL = 2POL; hind margin of pronotum, posterior corner of mesoprepectum, mesoscutellum, and mesoscutellar appendage yellow . . . . . *occipitosum* (Malaise)
- OOL = 2POL; OCL slightly longer than POL; thorax with mesoscutellum and mesoscutellar appendage nearly black . . . . . 8



Fig. 1. *Aglaostigma kawazoei*, holotype.

- 8. Antenna shorter than costa + stigma of forewing; hind wing with two middle cells . . . . . *helvicinctum* Togashi
- Antenna as long as costa of forewing; hind wing with one middle cell . . . . . *sapporonis* (Matsumura)

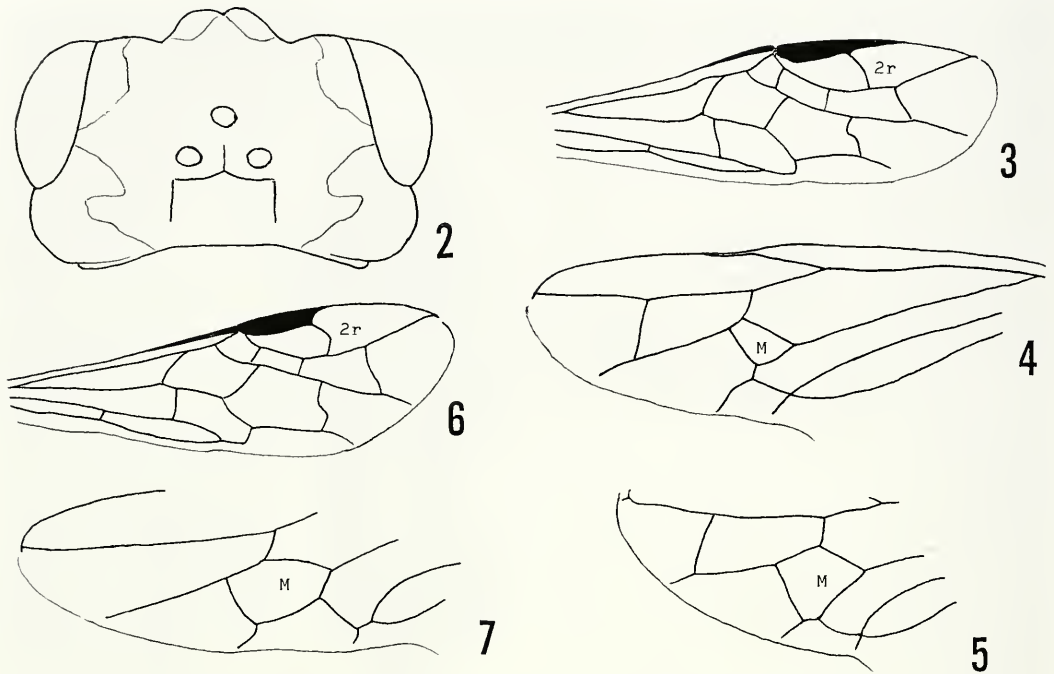
***Aglaostigma kawazoei* Togashi,  
new species**

(Figs. 1–5, 8–15)

Female.—Length, 8–9 mm. *Color*: Head and thorax black with following yellow: postocellar area, inner orbits, supraclypeal area, antennal sockets, clypeus, labrum, basal half of mandible, labial and maxillary palpi, posterior half of pronotum, and tegula. Abdomen yellow with following black: 1st tergite, narrow band on anterior margin of 2nd to 6th tergites, posterior 1/3 of 6th tergite, triangular macula of posterior margin of 8th tergite, central portion of 9th tergite, and circus. Antenna pale

yellow with black stripe on dorsal side. Wings hyaline, basal half of stigma and veins dark brown to black with apical half of stigma and costa of forewing yellow; forewing with a dark band below stigma (Fig. 1). Legs yellow with following black: coxae, hind femur except for basal 1/3, and apical 1/3 of hind tibia.

*Head*: Transverse (Fig. 2); postocellar area transverse with ratio of width to length about 2:1, convex; OOL:POL:OCL = 2.4:1.0:1.6; interocellar, postocellar, and lateral furrows distinct; frontal area concave with raised frontal ridges; median fovea large, deep, and circular in outline; lateral fovea small and circular in outline; supraclypeal area slightly convex; supra-antennal tubercles confluent with frontal ridges; clypeus rather flattened, subtruncate in front; labrum nearly flattened; antenno-ocular distance nearly as long as distance



Figs. 2-7. 2-5, *Aglaostigma kawazoei*. 6-7, *A. amoorensis*. 2, Head, dorsal. 3, Forewing. 4, Hindwing of female. 5, Hindwing of male. 6, Forewing. 7, Apical portion of hindwing.

between antennal sockets (ratio about 1.0:1.0); eyes rather small and slightly converge below, distance between them nearly as long as  $1.3\times$  height of each; occipital carina defined below and obsolete above; malar space nearly as long as diameter of front ocellus, nearly as long as  $0.7\times$  length of pedicel. Antenna nearly as long as costa of forewing, about  $2\times$  head width; relative lengths of segments about 1.5:1.0:3.1:2.6:2.1:1.8:1.6:1.5:1.5, pedicel longer than wide.

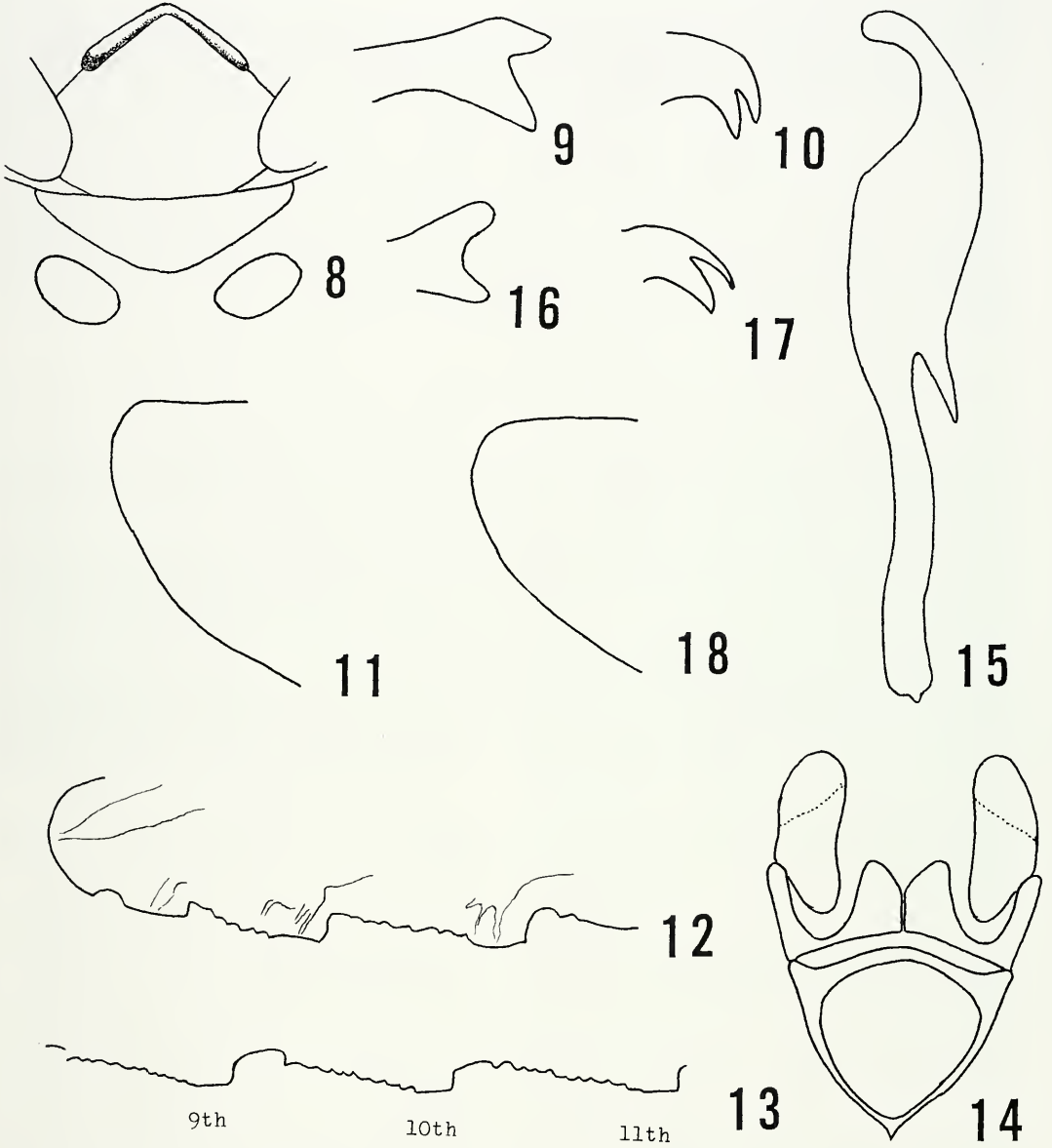
**Thorax:** Normal. Mesoscutellum convex, front margin acute (Fig. 8); cenchrus large, distance between cenchri nearly as long as breadth of one (Fig. 8). Wing venation as in Figs. 3, 4; radial crossvein (2r) of forewing nearly straight; hind wing with two middle cells; discoidal cell (M) small (Fig. 4); anal cell of hindwing sessile. Fore inner tibial spur as in Fig. 9; tarsal claws as in Fig. 10; hind basitarsus nearly as long as following 3 segments combined.

**Abdomen:** Normal. Sawsheath as in Fig. 11. Lancet with 20 serrulae; apical portion and 9th to 11th serrulae as in Figs. 12, 13.

**Punctuation:** Head matt, with rather coriaceous sculpture; pronotum and mesoscutum covered with medium-sized punctures; mesoscutellum and mesopleuron covered with setigerous punctures; abdominal tergites shagreened.

**Male.**—Length, 8 mm. Color as in female, but 7th to 9th tergites black; structure same as female except for size of middle cell (Fig. 5) and sexual characters; hind wing without marginal vein. Genitalia as in Fig. 14, black but apical half of harpe milky white; penis valve as in Fig. 15.

**Types.**—Holotype ♀, 21.IV.2005, Mt. Noto, Kameyama City, Mie Prefecture, Honshu, Japan, M. Inagaki leg. Paratypes: 1 ♀, 2 ♂, same data as for holotype except collectors, M. Inagaki and A. Kawazoe. All types deposited in



Figs. 8-18. 8-15, *Aglaostigma kawazoei*. 16-18, *A. amoorensis*. 8, Mesoscutellum and mesoscutellar appendage, dorsal. 9, Fore inner tibial spur, lateral. 10, Tarsal claw. 11, Sawsheath, lateral. 12, Apical portion of lancet. 13, 9th to 11th serrulae of lancet. 14, Male genitalia, ventral. 15, Penis valve. 16, Fore inner tibial spur, lateral. 17, Tarsal claw, lateral. 18, Sawsheath, lateral.

the National Science Museum (Natural History), Tokyo.

Distribution.—Japan (Honshu).

Food plant.—Unknown.

Etymology.—Named in honor of Mr. Akio Kawazoe, Kuwana City, Mie Prefecture, Japan.

Remarks.—This new species is close to *A. amoorensis*, but it is distinguished from the latter by the black mesopleuron (with yellowish white macula in *A. amoorensis*); by having two middle cells in the hind wing (one in *A. amoorensis*) (Figs. 4, 7); by the sessile anal cell of the

hind wing (with petiole in *A. amoorensis*) ( Figs. 4, 7); by the nearly straight radial crossvein of the forewing (curved in *A. amoorensis*) (Figs. 3, 6); by the shape of the tarsal claws (Figs. 10, 17); by the shape of the fore inner tibial spur (Figs. 9, 16); and by the shape of the sawsheath (Figs. 11, 18).

About 20 other species of *Aglaostigma* have been described from eastern Asia, other than Japan. From the descriptions (e.g., Malaise 1937; Wei and Nie 1998) and material available to me, the new species does not fit any of them. From *A. nigrocorne* Wei, *A. flatoposttrigium* Wei, *A. zigzaga* Wei, and *A. qinlingium* Wei from China, *A. kawazoei* is distinguished by the broad and rounded apex of the sawsheath in lateral view (narrow and truncated in lateral view in the above-mentioned four species). From *A. birmanicum* (Malaise) from Myanmar, *A. kawazoei* is distinguished by the color of the antenna (black in *A. birmanicum*), and by having two middle cells in the hindwing (one middle cell in the female of *A. birmanicum*). From *A. ruficorne* (Malaise) from Myanmar, *A. kawazoei* is separated by the color of the stigma of the forewing (fulvous in *A. ruficorne*) and by the color of the second and third tergites (black in *A. ruficorne*).

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